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ART UNIT	PAPER NUMBER
2171	

DATE MAILED: 01/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _09 October 2003_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1 and 3-38_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1 and 3-38_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _20 April 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

1.   This communication is responsive to Amendment B, filed 09 October 2003.

2.   Claims 1 and 3-38 are pending in this application. Claims 1, 8 and 32 are

independent claims. In Amendment B, claim 2 was cancelled, claims 16-38 were

added, and claims 1 & 3-15 were amended. This action is made Final.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

3.   Claims 1, 3-7, 16-23 and 32-38 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Patent No. 6,144,968 to Zellweger in view of U.S. Patent No.

5,544,354 to May et al. and further in view of U.S. Patent No. 6,430,558 to Delano.

Referring to claim 1, Zellweger teaches a contents structure as claimed. See

Figures 2-8 and the corresponding portions of Zellweger's specification for this

disclosure. In particular, Zellweger teaches a content indexing structure [20, 30 & 40]

comprising:

a first indexing level [hierarchical level of non-leaf nodes (e.g. Ux where x = 1, 2,

3, ... n)] having a plurality of first level content indexes [index nodes 20], one of the first

level content indexes representing particular category [topic (e.g. by topical keyword)]

associated with a particular feature [See Figs. 4 & 8-9]; and

a second indexing level [lower hierarchical level (e.g. Uxy where x = 1, 2, 3, ...n

and y = 1, 2, 3, ...n)] having a plurality of second level content indexes [index nodes 20],

each of the second level content indexes having an association [hierarchical relation

(e.g. x in example above)] with the first level content index representing the particular

category.

Zellweger's content indexes at each level are not explicitly connected in a

substantially circular manner as claimed. However, Zellweger's hierarchical index

structure is navigable in a circular manner as shown in Figure 4. A user can scroll

through a level in the hierarchy, and navigate to a higher or lower level to scroll through

as well. Furthermore, Figure 4d shows the capability of scrolling through the actual

objects in a circular manner. This provides suggestion for arranging Zellweger's

hierarchical indexing levels in a circular manner.

May discloses a system and method similar to that of Zellweger, wherein the

hierarchical index is arranged in a substantially circular manner as claimed. See Figure

1 and the corresponding portion of May's specification for this disclosure. In particular,

May's multimedia matrix is a hierarchical index structure having the hierarchical levels

connected in a substantially circular manner as claimed.

Neither Zellweger nor May explicitly associate a weighing value with each of the

second level content indexes for the circular arrangement as claimed. However, both

arrange the content indexes at each level according to a sequence. This in itself

provides suggestion for arranging each level according to a weighing value

representative of a sequence.

Delano discloses a system and method similar to those of Zellweger and May, wherein each hierarchical content indexing level is arranged according to weighting values as claimed. See column 7, line 59 – column 8, line 3 of Delano's specification for the details of this disclosure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to organize Zellweger's hierarchical indexing levels in the circular manner presented by May in accordance with the weighting scheme presented by Delano to obtain the invention as claimed. One would have been motivated to do so because of Zellweger's suggestions as discussed above in order to present a more user-friendly interface as suggested by May.

Referring to claim 3, the system and method of Zellweger in view of May and Delano as applied to claim 1 above discloses the invention as claimed. See Figures 1-9 and the corresponding portions of Zellweger's specification as well as Figures 1-2 and the corresponding portions of May's specification for this disclosure. Zellweger's (as modified by May and Delano) category consists of types [topics] and keywords as claimed.

Referring to claim 4, the system and method of Zellweger in view of May and Delano as applied to claim 1 above discloses the invention as claimed. See Figures 1-9 and the corresponding portions of Zellweger's specification as well as Figures 1-2 and the corresponding portions of May's specification for this disclosure. Zellweger (as modified by May and Delano) teaches the structure of claim 1, as above, wherein moving between contents indexed by the content indexing structure includes moving

from the first indexing level to the second indexing level [Zellweger: right arrow (See

Fig. 4)] or from the second indexing level to the first indexing level [Zellweger: left arrow

(See Fig. 4)] according to a user's manipulations of an input device [e.g. 14 (See Fig. 4)]

as claimed.

Referring to claims 5 & 6, the system and method of Zellweger in view of May

and Delano as applied to claim 1 above discloses the invention as claimed. See

Figures 1-9 and the corresponding portions of Zellweger's specification as well as

Figures 1-2 and the corresponding portions of May's specification for this disclosure.

Zellweger in view of May and Delano teaches the structure of claim 1, as above,

wherein moving between contents indexed at each level includes moving an input

device in a clockwise or counterclockwise direction [May: Column 6, lines 53-56 &

Zellweger: Column 4, lines 11-22] between associated level content indexes in a

substantially circular manner according to a user's manipulations of the input device as

claimed.

Referring to claim 7, the system and method of Zellweger in view of May and

Delano as applied to claim 1 above discloses the invention as claimed. See Figures 1-9

and the corresponding portions of Zellweger's specification as well as Figures 1-2 and

the corresponding portions of May's specification for this disclosure. Specifically,

Zellweger's (as modified by May and Delano) relationship of the first and second

indexing levels with respect to the present indexing level is updated [Zellweger: Column

4, lines 43-50] after movement between the two as claimed.

Referring to claim 16, the system and method of Zellweger in view of May and

Delano as applied to claim 1 above discloses the invention as claimed. See Figure 2

and the corresponding portion of Zellweger's specification for this disclosure.

Zellweger's (as modified by May and Delano) second level content index... is logically

coupled [by KID 22] to the first level content index representing the particular category,

the logical coupling allowing a user to traverse from the first indexing level to the second

indexing level, or vice versa [See Fig. 4] as claimed.

Referring to claim 17, the system and method of Zellweger in view of May and

Delano as applied to claim 1 above discloses the invention as claimed. See column 7,

line 59 – column 8, line 3 of Delano's specification for the details of this disclosure.

Zellweger's (as modified by May and Delano) second level content index with the

highest weighing value [See combination in claim 1] is most closely associated with the

particular category as claimed.

Referring to claims 18 & 19, the system and method of Zellweger in view of May

and Delano as applied to claim 1 above discloses the invention as claimed. See

Figures 2-4 and the corresponding portions of Zellweger's specification as well as

Figure 1 and the corresponding portion of May's specification for this disclosure. In

particular, each content index on a particular level is logically coupled [See Fig. 2c] to

another content index on the same level associated with another category as claimed.

Referring to claim 20, the system and method of Zellweger in view of May and

Delano as applied to claim 1 above discloses the invention as claimed. See Figures 2-4

and the corresponding portions of Zellweger's specification as well as Figure 1 and the

corresponding portion of May's specification for this disclosure. Zellweger (as modified by May and Delano) teaches the content indexing structure of claim 1, wherein a user traverses from the first level content index representing the particular category to a second level content index with the highest weighing value associated with the first level content index [See discussion of claim 4], and from the second level content index to another second level content index associated with a different category without reverting back to the first indexing level [Zellweger: Fig. 4c & May: Fig. 1] as claimed.

Referring to claim 21, the system and method of Zellweger in view of May and Delano as applied to claim 1 above discloses the invention as claimed. Specifically, any level of content index in Zellweger's (as modified by May and Delano) system is used to retrieve corresponding content as claimed. See Figures 2-4 and the corresponding portions of Zellweger's specification as well as Figure 1 and the corresponding portion of May's specification for this disclosure.

Referring to claims 22 & 23, the system and method of Zellweger in view of May and Delano as applied to claim 1 above discloses the invention as claimed. See Figure 1 and the corresponding portion of May's specification for this disclosure. May's (as applied to Zellweger and Delano) substantially circular manner is a circle or an oval as claimed.

Claim 32 is rejected on the same basis as claim 4. See the discussions regarding claims 1 and 4 above for the details of this disclosure.

Claims 33 and 34 are rejected on the same basis as claim 17, in light of the basis

for claim 32. See the discussions regarding claims 1, 4 and 17 above for the details of

this disclosure.

Claims 35-38 are rejected on the same basis as claims 20-23 respectively, in

light of the basis for claim 32. See the discussions regarding claims 1, 4 and 20-23

above for the details of this disclosure.

4.   Claims 8-15 and 24-31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Zellweger in view of May and Delano as applied to claim 1 above,

and further in view of U.S. Patent No. 6,415,319 to Ambroziak.

Referring to claim 8, Zellweger in view of May and Delano discloses a contents

display system [Zellweger: Fig. 1] comprising:

a memory [Zellweger: Database of Figs. 2-3];

an interface [Zellweger: Fig. 8] for storing information on analyzed features and

information on one or more content indexes for accessing the content from the memory

[See Zellweger: Figs. 8-9]; and

a content selector [Zellweger: 'integrated menu system' (Column 4, line 6 et

seq.)] for retrieving the content corresponding to the content index stored in the memory

according to a user's request, wherein indexes are generated according to a content

indexing structure including...[See the discussion regarding claim 1 above].

None of the references explicitly disclose "a contents feature analyzer" for

analyzing features of at least one contents unit provided from a source outside of the

contents display system as claimed. However, Zellweger's interface of Figs. 8-9 for associating keywords to the contents accomplishes this task indirectly through analysis of the user.

Ambroziak discloses a system and method similar to those of Zellweger, May and Delano, further including a concept extractor for extracting conceptual information from a document (content); analyzing the extracted conceptual information; and assimilating the extracted conceptual information into an index. See Figures 1 & 10-14 and the corresponding portions of Ambroziak's specification for this disclosure. In particular, Ambroziak teaches "a contents features analyzer [Index Server 130] for analyzing features [Fig. 10, Steps 1020-1050] of at least one contents unit [web document in the example provided]" provided from a source [network server] outside of the system "and storing [Fig. 10, Steps 1050-1060] information on the analyzed features and information on physical contents for moving to corresponding contents in the memory" as claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add Ambroziak's contents features analyzer to the system of Zellweger in view of May and Delano in order to automate Zellweger's process of creating the index by automatically extracting keywords from the contents and associating the contents with the keywords in the index. One would have been motivated to do so because of the common desire to automate processes commonly performed by a human user, in order to alleviate Zellweger's users of the need to analyze and index the contents manually through the interface.

Referring to claim 9, the system of Zellweger in view of May, Delano and Ambroziak as applied to claim 8 above discloses the invention as claimed. See Figures 2-4 and the corresponding portions of Zellweger's specification for this disclosure. Zellweger's (as modified by May, Delano and Ambroziak) first level content index representing the particular category best exemplifies [best exemplary keyword/topic] the particular feature of the category as claimed.

Claims 10-14 are rejected on the same basis as claims 3-7 respectively, in light of the basis for claim 8. See the discussions regarding claims 1-8 above for the details of this disclosure.

Referring to claim 15, the system and method of Zellweger in view of May, Delano and Ambroziak discloses the invention as claimed. See Figure 4 and the corresponding portion of Zellweger's specification for this disclosure. In particular, Zellweger's (as modified by May, Delano and Ambroziak) contents selector comprises:

a first contents selector [interface of Figs. 4a & 4b] for controlling a display of contents associated with the first level content indexes when the first level content indexes [non-LEAF nodes] stored in the memory are selected according to a user's manipulations; and

a second contents selector [interface of Figs. 4b & 4c] for controlling a display of contents associated with the second level content indexes when the second level content indexes [LEAF nodes] stored in the memory are selected according to a user's manipulations as claimed.

Claims 24-31 are rejected on the same basis as claims 16-23 respectively, in

light of the basis for claim 9 above. See the discussions regarding claims 8, 9 and 16-

23 for the details of this disclosure.

Response to Arguments

5.   Applicant's arguments with respect to claims 1 and 3-15 have been considered

but are moot in view of the new ground(s) of rejection.

Referring to applicant's remarks on pages 14-16 regarding the Section 103

rejections of the independent claims: Applicant argued that none of the references

teach the content indexes at a given level being "connected in a substantially circular

manner" as claimed.

The examiner disagrees for the following reasons: May, as added to Zellweger,

clearly teaches a circular connectivity of each indexing level within the hierarchy. See

Figure 1 and the corresponding portion of May's specification for this disclosure.

Specifically, each hierarchical level in the matrix database is a separate matrix for that

level, in which each cell is connected in a circular fashion to another cell at that level.

Therefore, the system of Zellweger in view of May and Delano as applied above does

teach the invention as claimed.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

U.S. Patent No. 5,875,446 to Brown et al. is considered pertinent to applicant's

disclosure and portions of applicant's claimed invention.

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brian Goddard whose telephone number is 703-305-

7821. The examiner can normally be reached on M-F, 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306 for all

communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

3900.

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bdg
December 29, 2003